Growth Mindset: What is it? And why does it matter so much?

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What are our goals today?

- Discover what it means to have a growth mindset
- Understand why it is beneficial for students (and us!)
- Discuss concrete ways to cultivate a growth mindset

Do you believe this is true? We do!
This is how we got interested in this topic.
What is a growth mindset?

Psychological research describes two ways we can understand intelligence:

<table>
<thead>
<tr>
<th><strong>Entity view:</strong> Theory that a person’s mental ability is fixed and stable.</th>
<th><strong>Incremental view:</strong> Theory that one’s mental ability is fluid and changeable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students do well (or badly) because they are smart (or not)</td>
<td>Students do well (or badly) because they work hard, <strong>struggle</strong>, &amp; persevere (or not)</td>
</tr>
<tr>
<td>Teachers can only help students SHOW their innate mental ability (or lack thereof)</td>
<td>Teachers can help students IMPROVE mental ability with hard work, practice, &amp; failure</td>
</tr>
<tr>
<td>Belief in this theory creates <strong>Fixed Mindsets</strong> in people</td>
<td>Belief in this theory creates <strong>Growth Mindsets</strong> in people</td>
</tr>
</tbody>
</table>

Psychologist Carol Dweck developed these theories and has described the two mindsets that result from them. [Click here](#) to see a description of this work.
The “Golden Nugget” of Growth Mindset

I've missed more than 9000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed.

- Michael Jordan

Have you ever felt like you learned from a failure? If so, that’s they key to a growth mindset!
Growth Mindset: The Power Of “Yet”....

Carol Dweck’s bestselling book on growth mindset

Click here to watch Carol Dweck’s TED talk on The Power Of Believing that You Can Improve

Click to see Sir Ken Robinson’s TED talk on Do Schools Kill Creativity? “If you’re not prepared to be wrong, you’ll never come up with anything creative

Click here to see how Jo Boaler applies growth mindset to math education
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A Person’s Mindset May Affect Learning

Click to hear about how different cultures and different teachers demonstrate fixed versus growth mindsets.

When have you experienced fixed and growth mindsets in education? How have you felt that these have affected learning?
So how might struggle and failure help learning?

Because neurons in the brain are the basis of learning and they are active when we make mistakes!!

Neurons that fire together wire together.

— Donald O. Hebb —

http://tinyurl.com/hfz3r4j
An over-simplified primer – Part 1

The human brain...

Is made up of billions of individual neurons
An over-simplified primer-Part 2

Neurons connect together to communicate, and when specific ones “communicate” often...

They create vast networks that support rich information processing!
Think of it this way....

The LA freeway is like neural communication in your brain...

Exits you take often are like strong neural connections, but exits not used are like neural connections that are pruned.
So, wait...why do these tools work?

So, over time, it seems to be that making mistakes changes our brains.

See how neural connections change over the lifespan? First we develop connections, then we prune. This also shows learning!
And Research Shows That a Growth Mindset Influences Processing of Information in Our Brains!

Click here to access a copy of Mangels’ et al (2007) research.

Click here to access a copy of Moser et al’s (2011) research.
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How can we cultivate a growth mindset?

What are some ways that we have seen people cultivate a growth mindset with their students?
How can we cultivate a growth mindset?

Click here to read what psychological research says about the effects of these two types of praise.
Sarah spends week 1 on learning skills in Psy101

Here’s a story about one of my failures...
0.5 How can you succeed in this class?

A Growth Mindset leads to success!

What is a **growth mindset?**

✓ It’s the idea that ability is NOT innate!
✓ Ability can be improved though **dedication** and **hard work**

Click here to watch Carol Dweck’s TED talk on Growth Mindset.
Click here to see her webpage with her research and resources.
### 0.5 How can you succeed in this class?

On Part E of your Week 1 Class Activity sheet, please describe 3 ways you can have a growth mindset to our class! We will discuss them in a minute!

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#### DEVELOPING A GROWTH MINDSET

<table>
<thead>
<tr>
<th>INSTEAD OF.....</th>
<th>TRY THINKING....</th>
</tr>
</thead>
<tbody>
<tr>
<td>I’m not good at this</td>
<td>What am I missing?</td>
</tr>
<tr>
<td>I give up</td>
<td>I’ll use a different strategy</td>
</tr>
<tr>
<td>It’s good enough</td>
<td>Is this really my best work?</td>
</tr>
<tr>
<td>I can’t make this any better</td>
<td>I can always improve</td>
</tr>
<tr>
<td>This is too hard</td>
<td>This may take some time</td>
</tr>
<tr>
<td>I made a mistake</td>
<td>Mistakes help me to learn</td>
</tr>
<tr>
<td>I just can’t do this</td>
<td>I am going to train my brain</td>
</tr>
<tr>
<td>I’ll never be that smart</td>
<td>I will learn how to do this</td>
</tr>
<tr>
<td>Plan A didn’t work</td>
<td>There’s always Plan B</td>
</tr>
<tr>
<td>My friend can do it</td>
<td>I will learn from them</td>
</tr>
</tbody>
</table>
What’s your opinion?

Will you pledge to NOT drop this class without seeing me first?

A. Yes

B. No
0.5 How can you succeed in this class?

Let’s learn now what study skills we are good at and what we can use a growth mindset to improve on!

At the heart of the STUDENT SUCCESS KIT is a pre-assessment survey. It asks questions in 18 areas (called “tools”), which fall under five main categories:
- Academic Skills Development
- Study and Thinking Skills
- Personal Issues
- Planning for the Future
- Resource Needs

Also included in the STUDENT SUCCESS KIT is an exercise that will provide a graphic representation of your Student Success Profile. A Tool Manual has been developed for each tool and provides additional exercises and information to address each student’s success needs. This information is available through the individual who is assisting you in the process.

Instructions: Use the following values of a 5 point scale to score each of the questions on the questionnaire:

- 5 The statement is *always or almost always* true for you (around 100%)
- 4 The statement is *often* true for you (around 75%)
- 3 The statement is *sometimes* true for you (around 50%)
- 2 The statement is *rarely* true for you (around 25%)
- 1 The statement is *never or almost never* true for you (around 0%)

0.5 How can you succeed in this class?

Then on the back page, please add of the totals to get a grand score for each of the 5 categories!
What’s your results?

What category did you score lowest on? This is where you need to have a Growth Mindset!

A. Academic skills development
B. Study & thinking skills
C. Personal issues
D. Planning for the future
0.5 How can you succeed in this class?

The 8 steps to success in our class!

- Step 1: Have a growth mindset!
- Step 2: Know the syllabus & schedule
- Step 3: Break reading into parts & read ACTIVELY
- Step 4: Do InQuizitive to help you practice concepts
- Step 5: Come to class, take notes ACTIVELY, & participate.
- Step 6: Download my PPT slides, ACTIVELY correct your notes, and complete your Class Activity Sheet.
- Step 7: Do practice quiz in Appendix B & check answers
- Step 8: Take the chapter quiz on Cobra & check answers - twice!
Time for a break!

Let’s have a 5 minute break and meet in the B114 computer lab to get on Cobra and learn how to use the materials to succeed in class!
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What do you think? Did we reach our goals for today?
Please complete the feedback sheet on your table.
Thank you!
Take home message...

It’s not that I’m so smart; I just stay with problems longer.

Albert Einstein

A Growth Mindset at Chew Valley
Shameless plugs for future activities!

Do you want more discussions about growth mindsets?

Using student response systems for attendance, participation and learning

Brain-based learning v2.0

Supporting first-year students in your classes.

Let me know on the sheet if you might be interested!

http://tinyurl.com/hvqvgkq

http://tinyurl.com/zm79lyp

http://tinyurl.com/zqaj4td
Thank you for the chance to work with you!

Please feel free to share any thoughts or feedback with us

Marsh is mjones@parkland.edu and in D165.
Sarah is sgrison@parkland.edu and in D177 and in the Hub (D115)
Did you remember to sign in?

We are happy to send anyone a copy of this PPT!